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Identifier: Naohiko TSUZUKI, et al.

REMARKS

The Examiner has rejected the claims under 35 U.S.C. § 103(a) as being unpatentable over either Aoki (U.S. Patent No. 4,044,653) or Nakamura et al. (U.S. Patent No. 5,443,782) as being modified by Jacobson et al. (U.S. Patent No. 6,502,620) where Jacobson is referenced for teaching a two-way hydraulic pump. In response to the rejections, Applicant provides the following traverse.

Regarding Aoki, the reference teaches pump P connected between a reservoir and a solenoid SOLa where the solenoid alters the feed direction to a piston chamber A to drive the piston 2 in a forward or reverse direction. Replacing the pump P of Aoki with a dual stage pump from Jacobson as suggested by the Examiner would not provide the present invention because there would still be no mechanism in Aoki to feed fluid to the return side of the piston chamber A. Accordingly, the proposed modification to Aoki fails to teach each limitation of the claims. *In re Royka*, 490 F.2d 981 (CCPA 1974) (a prima face case of obviousness is established only where the combination of cited references teaches or suggests each limitation in the claim).

Regarding Nakamura, the reference teaches at column 4, line 12, that "[a] substantial difference between each method of the present invention and each conventional method in respect to the structure of an injection-molding hydraulic circuit system consists in that the hydraulic circuit system of the

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present invention is additionally equipped with a direction shifting valve V6". Nakamura teaches a plurality of direction shifting valves V1, V2 and V6 that, in combination with a unidirectional pump PV, displaces the pump 2 in a forward direction (column 3, line 23) and in a rearward direction (column 4, line 42 and column 5 line 7) while limiting the back pressure that otherwise delays the motion of the piston (column 2, line 21).

Based on Applicant's analysis of Nakamura, Applicant has amended claims 1 and 2 to recite that the hydraulic circuit comprises a check/one way valve. Such an amendment is supported on page 12 of the specification and clarifies that the valve is not a "direction shifting valve". Modifying Nakamura to exclude direction shifting valves renders Nakamura incapable of operating as required and would be improper so that Applicant respectfully asserts that the rejection has been overcome. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984) (a proposed modification to a reference cannot render the reference unsatisfactory for its intended purpose).

Applicant has further amended Claim 2 to distinguish over the prior art and, for example, Jacobson. Specifically, Claim 2 now recites the use of a plurality of two-way pumps to drive a single piston. In comparison, Jacobson teaches that each two-way pump is used to move a single piston. Accordingly, as indicated, Aoki or Nakamura as modified by Jacobson fails to teach each

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claimed limitation so that the rejections have been overcome. *Royka*, 490 F.2d at 981.

Furthermore, Applicant respectfully asserts that the claims distinguish over Jacobson as follows. Jacobson teaches a two-way pump employing a swash plate and driven by a general motor. It is different from a servomotor as in the current application. Regarding supplying and discharging hydraulic fluid, in order to supply hydraulic fluid equivalent to the shortfall from a hydraulic fluid tank 36, Jacobson teaches a servo pump is employed. On the other hand, excessive hydraulic fluid is returned to the hydraulic fluid tank 36 of Jacobson via open/close valves 38, 40, common pipeline 20, and open/close valves 39.

In comparison, the present invention provides check/one-way valves 16a for providing a simplified the pipeline. Also, a servomotor is employed, thereby enabling rotational control in injection and allowing torque control in maintaining pressure to be accurately and promptly performed.

Applicant respectfully requests a two month extension of time for responding to the Office Action. **The fee of \$450.00 for the extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.**

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USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit
any excess payment to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper
form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,
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